

## Features

SB-DN-MR0410 Relay Module which embedded 16A Magnetic Latching Relay Unit . There is no power consumption and it has a long life time. manual control switches are available for each channel.

- 4 channels relay output
- Maximum 4 separate area
- Each area has 8 scenes, Maximum scene running time is 60 minutes
- Each area has 2 sequences, each sequence has 4 steps
- Each channel has Protection Delay time after Turn OFF —[0-60 minutes]
- Each channel has Delay time for Turn ON— [0-25 seconds]
- Each channel has LED Indicator and manual Control switch
- It is optional setting of choosing a preset scene or back to previous scene when power on again after power off

## Important Notes

- Bus cable- HDL Bus/KNX Cable, 0.8mm Single Core Copper cable
- Bus Connection - Series connection (hand by hand)
- Connect checking—Check all connection after installation
- Output Channel – Maximum current of each channel is 10A
- Output channel – The following table shows the recommended Power for each channel when connect to different type of load. And for each channel it is recommended to connect 10A MCB.
- Load type and recommended Power
 

Motor:	1HP ( 1HP=746W )
Incandescent Lamp:	1600W
Inductive Transformer:	1000 W
Electric Transformer:	800 W
230V Halogen Lamp :	1600 W
Mercury Vapor Lamp	
*No Compensation Lamp:	1000 W
*Parallel Compensation Lamp:	800 W
Fluorescent Lamp T5 / T8	
*No Compensation Lamp	1000 W
*Parallel Compensation Lamp:	800 W
*DUO Lamp Series :	800 W
*No Compensation Lamp:	1000 W
*Parallel Compensation Lamp:	800 W

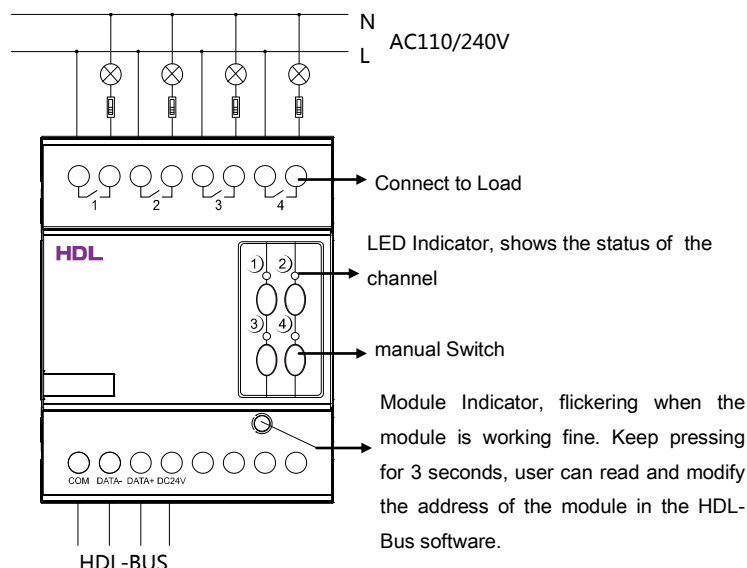
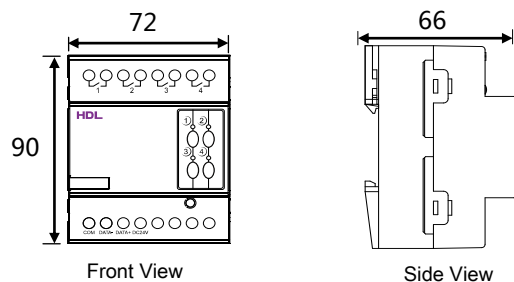
## Installation Step

- 35mm Din Rail Installation, inside DB Box
- Make remark for each output connection cable, recognize high power and low power cable
- Connect the load and HDL Bus
- Check the HDL Bus connection, avoid any mistake
- Check if there is any short circuit in output connection cable

## Product Specifications

- Bus working Voltage : DC24V
- Static BUS Power Consumption : 15mA/DC 24V
- Dynamic BUS Power Consumption : 40mA/DC 24V
- Maximum output channel current : 10A
- Relay Unit Electrical Life time : >60000次 ( Resistance Load )
- Relay Unit Capacitance Load : < 150μF
- Protection : Connect Extra 10A MCB
- Certification : CE

## Layout and Dimension



## HDL-Bus Definition for cable

CAT5/CAT5E	Bus	HDL Bus/KNX Cable
Brown White/ Orange White	COM	Black
Blue white/ Green White	DATA-	White
Blue/Green	DATA+	Yellow
Brown/Orange	DC24V	Red



WARNING

## Safety Attention

- Maximum Current in each channel is 10A
- 10A MCB for each channel protection is must
- Screw down strength is less than 0.4Nm
- Power cable : AC in: 2.5mm<sup>2</sup> - 4mm<sup>2</sup>
- Load Cable : 2.5mm<sup>2</sup> - 4mm<sup>2</sup>
- Installation Position: Distribution Box (DB )
- Do not make wrong connection on Bus interface, it will damage the Bus interface this module
- Do not get AC240V voltage into Bus wire , it will damage all of devices in system
- Assure a good ventilation circumstances
- Rain, liquid, and aggressive gas are not allowed to close to it

## Product Specifications

- Working Temperature : 0~45°C
- Working Relative Humidity : 20%~90%
- Storage Temperature : -40°C~+55°C
- Storage Relative Humidity : 10%~93%
- Protection : IP20